

Appendix C. BMP Verification Review Panel Charge and Members

The Chesapeake Bay Program convened the [BMP Verification Review Panel](#) in September 2012 to provide an independent perspective and expert evaluation of both the components of the basinwide verification framework as they were being developed as well as the jurisdictions' proposed enhanced verification programs. There were no examples to follow in terms of a comprehensive BMP verification program extending across a large, multi-state watershed, addressing a multitude of source sectors all at the same time. Therefore, the Bay Program Partners sought the expertise and advice of recognized experts in related disciplines. The Panel brought to the Bay Program a diversity of experiences and expertise, drawn from programs, institutions, and agencies around the Chesapeake Bay watershed and across the country.

Review Panel Charge

The BMP Verification Committee drafted and the Management Board approved a charge to the Panel which addressed two major objectives:

- Providing advice, feedback, and recommendations to the Chesapeake Bay Program partnership as it develops its basinwide verification framework; and
- Using the verification principles as criteria for assessing the strengths and any possible vulnerabilities in the state verification programs and providing written feedback and recommendations on each jurisdiction's program.

The approved Panel's charge is provided in Table C-1. The charge to the Panel also asked that the Panel review and provide feedback on and recommendations for changes to the draft set of BMP verification principles. Further, the charge requested that individual panel members work directly with the appropriate source sector/habitat restoration workgroups, providing advice, feedback, and recommendations during the respective workgroup's development of verification guidance specific to their pollutant source sector/habitat. Finally, the Bay Program charged the Panel with evaluating whether the level of verification rigor is consistent across source sectors and across all seven watershed jurisdictions. Beyond its established charge, the Verification Review Panel agreed that its members will be available for further consultation with the states as they develop and document their enhanced verification programs.

Table C-1. BMP Verification Review Panel charge

**Approved September 13, 2012
by CBP Management Board**

Overview

The Chesapeake Bay Program partnership has embarked on a precedent-setting process for developing a basinwide BMP verification framework supporting state specific BMP verification programs. In addition to partnership adoption of a set of verification principles and development of sector focused verification protocols, an independent panel of national and regional verification experts will be established. The BMP Verification Review Panel will provide advice, feedback, and recommendations to the Chesapeake Bay Program

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partnership as it develops a BMP Verification Program for confirming nutrient and sediment reductions from the full array of best management practices and technologies implemented across all sources (agriculture, urban, on-site treatment systems, wastewater dischargers, etc.) in the Chesapeake Bay Watershed.

Charge

The BMP Verification Review Panel (the Panel) will provide advice, feedback, and recommendations to the Chesapeake Bay Program partnership as it develops its Verification Program.

The Panel will review and provide feedback on and recommendations for changes to the draft set of BMP verification principles.

Individual panel members will work directly with the appropriate source sector/habitat restoration workgroups, providing advice, feedback, and recommendations during the respective workgroup's development of verification protocol specific to their sector/habitat.

The Panel will use the verification principles as criteria for assessing the strengths and any possible vulnerabilities in the state verification programs, providing written feedback and recommendations to the Chesapeake Bay Program's BMP Verification Committee on each jurisdiction's program.

The Panel will also evaluate whether the level of verification rigor is consistent across source sectors and across all seven watershed jurisdictions.

Membership

The Panel will be comprised of recognized national and regional verification, certification, and mitigation tracking experts who are independent of the Chesapeake Bay Program partnership.

The panel as a whole will include expertise and proficiencies in as many of the following areas as possible:

- Applied knowledge and experience in developing and managing verification programs.
- Applied knowledge and experience in balancing verification needs with resource/staff needs.
- Knowledge of variety of verification tools (on-the-ground data collection, verification techniques, statistical techniques, survey techniques, etc.) available and their utility and application for verifying practices across a multitude of sources.
- Expertise in the social sciences with regard to understanding how to best structure surveys and other mechanisms for gathering data and verifying actions taken.
- Knowledge of water quality-related nutrient and sediment reduction practices and innovative technologies within various source sectors (agriculture, urban, on-site systems, wastewater, etc.).
- Knowledge of the Chesapeake Bay Program, TMDLs, and concept of reasonable

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assurance for nonpoint source nutrient/sediment reductions.

- Knowledge and expertise necessary to really work through the entire verification framework coming forth from the work of the partnership.
- Understanding of how practices and technologies and their effectiveness may vary by geographic region in the watershed.
- Balance of membership from government, academic, programmatic, private sector, etc.

Specific members are sought from the following types of members, but there is no requirement for ensuring all of these potential members are included on the panel:

- Members with specific source sector experience in agriculture, stormwater, and on-site treatment systems.
- Member from the prior National Academy of Science/National Research Council's Chesapeake Bay Independent Evaluation Committee (see separate file listing the Committee members).
- Member(s) with recognized national perspective and can provide a larger view than just a regional and local focus.
- Member with from a local government with well recognized hands-on experience with verification at the locality scale.
- Member with demonstrated habitat restoration and mitigation program verification related experience.
- Private sector member with ISO 9000/14000 experience.
- Member with LEED/Green Building Council experience with verification procedures.
- Member(s) from the Chesapeake Bay Commission's Economics of Nutrient Trading Study Advisory Council members (see separate file listing Advisory Council members).
- Members with recognized regional/local expertise so the members come to the table already knowing the Bay watershed states, the issues, and the challenges being faced.

All panelists will be asked to identify any potential financial or other conflicts of interest prior to serving on the Panel. The Panel will have an equitable representation of experts, affiliations, and source sector and geographic knowledge. These conditions will ensure the Panel is not biased toward particular interests or regions.

The Panel may elect to solicit input or presentations from groups that may not qualify as panel participants but may provide valuable insights into the verification issue that will help with its review.

Review Panel Membership

In convening the Panel, the Bay Program sought a membership that would be comprised of recognized regional and national verification, certification, and mitigation tracking experts who were independent of the Chesapeake Bay Program. The BMP Verification Committee outlined a series of desired expertise and proficiencies which would be reflected in the Panel membership (Table C-1). Examples included applied knowledge and experience in developing and managing

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verification programs as well as knowledge of the variety of verification tools available (e.g., on-the-ground data collection, verification techniques, statistical techniques, survey techniques, etc.) and their utility and application for verifying practices across a multitude of source sectors and habitats.

The Bay Program was looking for a balance of Panel membership from government, academia, non-governmental organizations, and the private sector. Towards this objective, the BMP Verification Committee included a specific request for proposed members which included a detailed listing of the types of members being sought as part of its widely distributed call for panel members (Table C-1). Two specific examples were members were sought with specific source sector experience in agriculture, stormwater, and on-site treatment systems and a member from the prior National Academy of Sciences National Research Council's Chesapeake Bay Independent Evaluation Committee. However, there was no requirement applied for ensuring all of these potential member types were included on the panel.

In making decisions on the Panel members to recommend to the Management Board for final approval, as described below, the BMP Verification Committee sought a Panel membership which would have an equitable representation of experts, affiliations, source sectors, and geographic knowledge. All panelists were asked to identify any potential financial or other conflicts of interest prior to serving on the Panel. These conditions were set up in advance to ensure the Panel was not biased toward particular interests or regions.

Process for Review Panel Membership Selection

At its [February 2012 meeting](#), the Bay Program's Principals' Staff Committee agreed to proceed forward with development of a basinwide BMP verification framework, including convening of a panel of verification experts.¹ That same month, the Bay Program's Management Board decided at its [February 9, 2012 meeting](#) that it would be responsible for making decisions on the BMP Verification Review Panel's final membership and charge based on recommendations from the BMP Verification Committee.²

Based on the June 21, 2012 call for nominations distributed via email to the Bay Program's Water Quality and Habitat goal implementation teams, their respective workgroups, and the Bay Program's three advisory committees—Citizens, Local Government, and Scientific and Technical, the BMP Verification Committee received a total of 27 nominations for panel members. Committee members then were asked to provide their top five nominees as well as identify any nominee(s) they felt had either a conflict of interest or did not have the expertise being sought for the panel members.

The results from Committee members' voting were compiled and shared with the full Committee membership in advance of its [August 16, 2012 conference call](#).³ Committee members narrowed down the list of nominees to a set of 13 experts. The Committee had one final review of the narrowed down list through the end of August, with a number of Committee members concurring with the full list for final selection by the Management Board. The Management Board accepted the 13 nominees at its [September 13, 2012 meeting](#), and also approved the BMP

¹ www.chesapeakebay.net/calendar/event/17880/

² www.chesapeakebay.net/calendar/event/17872/

³ www.chesapeakebay.net/calendar/event/18556/

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Verification Review Panel's Charge and Operations as recommended by the BMP Verification Committee.⁴ The full list of Panel members, their contact information, and short biographies is provided in Table C-2.

⁴ www.chesapeakebay.net/calendar/event/18086/

Table C-2. BMP Verification Review Panel members

<u>Name</u>	<u>Affiliation</u>
Rich Batiuk (Coord.)	U.S. EPA, Chesapeake Bay Program Office (CBPO)
Jeremy Hanson (Staff)	Chesapeake Research Consortium, CBPO
Curtis Dell	USDA NRCS & USDA Agricultural Research Service
Mike Gerel	Sustainable Northwest
Tim Gieseke	Ag Resource Strategies
Rebecca Hanmer	Retired Citizens Advisory Committee
Dianna Hogan	U.S. Geological Survey Eastern Geographic Science Center
Richard Klein	Community and Environmental Defense Services
Andrew Sharpley	University of Arkansas
Tom Simpson	Water Stewardship, Inc
Gordon Smith	Wildlife Works Carbon LLC
Rebecca Stack	District of Columbia Department of the Environment (DDOE)
Robert Traver	Villanova University, Department of Civil & Environmental Engineering
Dana York	Green Earth Connection
Dan Zimmerman	Warwick Township

Curtis Dell, Ph.D.

Research Soil Scientist, USDA-ARS-Pasture Systems and Watershed Management Research Unit; USDA-NRCS Science Advisor for the Chesapeake Bay Watershed, and; Adjunct Associate Professor, Ecosystem Science and Management Department, Penn State University.

Curtis Dell received a B.S. in Agronomy (1985) and M.S. in Soil Microbiology (1991) from Purdue University, and a Ph.D. in Soil Microbiology from Kansas State University (1998). After completing his PhD, he spent one year as a Congressional Science Fellow in the office of U.S. Senator Kent Conrad of North Dakota and two years as a post-doctoral Research Associate at Michigan State University. Since 2001, he has been a Research Soil Scientist with the USDAARS at University Park, Pennsylvania. His research has focused on carbon and nitrogen cycling in agricultural soils and the impact of nutrient management on water and air quality. Dr. Dell currently lead projects studying impacts of using various manure application equipment on ammonia and nitrous oxide emissions from soil; soil carbon sequestration and nitrous oxide emissions with switchgrass grown for biofuel feedstocks and in sustainable dairy forage rotations; and utilization of slow release and inhibitor-treated nitrogen fertilizers to reduce nitrogen gas emissions and enhance crop uptake. He is also part of a team researching impacts of various aspects of manure management on water quality. Currently, he is on a special assignment with USDA-NRCS as Science Advisory for the Chesapeake Bay Watershed, where he provides input on the new and modified agricultural conservation practices to

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help reduce nutrient inputs into the Bay.

USDA-ARS-PSWMRU
Building 3702, Curtin Road
University Park, PA 16802
Phone: (814) 863-0984 (office)
Phone: (814) 880-0366 (cell)
Curtis.Dell@ars.usda.gov

Mike Gerel

Klamath Program Director, Sustainable Northwest

Mike Gerel leads Sustainable Northwest's work in the Klamath River Basin to help resolve years of high profile water disputes and bring environmental and economic health to a region uniquely rich in biodiversity, agricultural productivity, culture. He has 20 years' experience directing complex water resource science and policy efforts with stops at the Chesapeake Bay Foundation, Sustainable Conservation, the Virginia Department of Conservation, and U.S. EPA contractors.

Mike was integral to the creation of the landmark new plan that will guide restoration of the Chesapeake Bay ecosystem. He is a skilled communicator and strategic thinker with a special knack for finding science-based, collaborative solutions that balance the needs of natural resources and people. Mike has a Masters in Environmental Science & Policy from Johns Hopkins University, Bachelors in Biology from the University of Richmond, is a fellow with the Virginia Natural Resource Leadership Institute, and serves on an U.S. EPA Chesapeake Bay restoration practice verification expert panel. Mike is both an avid outdoorsman and indoorsman, enjoying hiking, biking, independent music, baseball on TV, and trying to keep up with his fiancée Jess and 3-year old lab Moka.

813 SW Alder Street, Suite 500
Portland, Oregon 97205
503-221-6911 x106
mgerel@sustainablenorthwest.org

Tim Gieseke

President, Ag Resource Strategies, LLC

Tim Gieseke is president of Ag Resource Strategies, LLC; a business addressing the challenge of integrating food production and natural resource management to reap the best of both worlds. His current and past efforts include natural resource assessment projects with non-government organizations and local, state and federal agencies. He has developed and implemented environmental quality assurance processes on several hundred farms with support from livestock groups including Minnesota Milk Producers Association, and the Minnesota Department of Agriculture. He consults with organizations and project such as United Nations Foundation, 25x25, and US Water Alliance on ecosystem service market research and development. For the CRP Readiness Initiative, an effort by NRCS and the University of Wisconsin to expand the conservation delivery system by training local government, NGO and private sector professionals, he develops curriculum and provides training in the Midwest. In 2011, he published *EcoCommerce 101: Adding an ecological dimension to the economy*, a book describing a process for including agro-environmental externalities into the economy.

In the decades prior to beginning his business in 2007, his career included farming, local government conservation, farm bill policy analysis, and he received his master's degree in environmental sciences.

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He, his wife and three boys reside on and manage their fourth-generation farm in southern Minnesota.

40322 541st Avenue
New Ulm, Minnesota 56073
tgieseke@agresourcestrategies.com
Phone: (507) 359-1889

Rebecca Hanmer

Retired, Chesapeake Bay Program Citizens Advisory Committee

Rebecca W. Hanmer is a member of the Chesapeake Bay Program's Citizens Advisory Committee. She retired in 2007 after a four decade government career that included over 30 years in the U.S. Environmental Protection Agency. At EPA, she held a number of senior positions, including Director of EPA's Office of Federal Activities; Deputy Regional Administrator in Region I (Boston); Regional Administrator in Region IV (Atlanta); Director, HQ Office of Water Enforcement and Permits; Deputy Assistant Administrator for Water and Acting Assistant Administrator for Water; Acting Regional Administrator in Region VIII (Denver); Water Protection Division Director in Region III (Philadelphia) and Director, Chesapeake Bay Program Office (2002-2007). She has administered Clean Water Act programs at both policy and operational levels, including water quality standards and the NPDES permit program.

138 Caroline Street
Fredericksburg, Virginia 22401
540-371-8787
rwhanmer@yahoo.com

Dianna Hogan, Ph.D.

Research Physical Scientist, Eastern Geographic Science Center, U.S. Geological Survey

Dianna Hogan is a Research Physical Scientist with the U.S. Geological Survey Eastern Geographic Science Center in Reston, Virginia. She has a BS in Biochemistry, a MS in Biology, and a PhD in Environmental Science and Public Policy. Her research focuses on ecosystem services and the environmental effects of land use on natural systems. Current and recent projects include an assessment of the ability of urban stormwater Best Management Practices (BMPs) in the Chesapeake Bay Watershed to mitigate water quality, quantity, and flow; and the development of an ecological value model to support land use decision-making in south Florida.

12201 Sunrise Valley Drive, MSN 521
Reston, VA 20192
Phone: (703) 648-7240
dhogan@usgs.gov

Richard Klein

Founder and President, Community & Environmental Defense Services

Richard Klein is the author of *How To Win Land Development Issues* and *Everyone Wins: A Citizens Guide To Development*, which was published by the American Planning Association. He has been working in the community and environmental advocacy field for 36 years. From 1979 to 1987 he worked for the Maryland Department of Natural Resources and spent ten of those years as director of the Maryland Save Our Streams program.

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In 1987, the author founded Community & Environmental Defense Services (www.ceds.org), a company which assists people in resolving their concerns about activities posing a threat to a neighborhood or the environment. Since 1987 he has evaluated hundreds of proposed development projects for impacts to neighborhoods, aquatic systems, and other environmental resources. These projects range from a single acre to massive residential-commercial complexes and range from coast to coast. In most cases these evaluations result in recommendations for minimizing impacts while allowing applicants to achieve most of their goals. The author has testified before many administrative and judicial decision-makers both as a lay and expert witness.

Over his 36-year career the author has helped citizens with just about every form of growth and growth impact imaginable; not just those presented in *How To Win Land Development Issues* but many more. This experience allows Mr. Klein to quickly identify the impacts likely to result from a proposed development project and to swiftly formulate winning solutions. His background as both an agency insider and citizen advocate also allows the author to effectively negotiate with regulatory staff and other decision-makers. This experience accounts for the unusually high success rate (75%) of CEDS in resolving citizen concerns.

811 Crystal Palace Court
Owings Mill, Maryland 21117
Rklein@ceds.org
Phone: (410) 654-3021

Andrew Sharpley, Ph.D.

In 2006, Andrew Sharpley joined the Department of Crop, Soil and Environmental Sciences, University of Arkansas, Fayetteville. He is Co-Chair of the Division of Agriculture's Environmental Task Force and Discovery Farms Program. He received degrees from the University of North Wales, United Kingdom in 1973 and Massey University, New Zealand in 1977, and spent 25 years with the USDA-ARS in Oklahoma and then Pennsylvania. His research investigates the cycling of phosphorus in soil-plant-water systems in relation to soil productivity and water quality and includes the management of animal manures, fertilizers, and crop residues. He also evaluates the role of stream and river sediments in modifying phosphorus transport and response of receiving lakes and reservoirs. He developed decision making tools widely used by US EPA and NRCS for agricultural field staff, to identify sensitive areas of the landscape and to target management alternatives and remedial measures that have reduced the risk of nutrient loss from farms. He is Editor-in-Chief of the Soil Science Society of America, in 2008 was inducted into the USDA-ARS Hall of Fame, and in 2012 received the Christopher Columbus Foundation Agriscience Award. Dr. Sharpley serves on National Academy of Science Panels and EPA's Scientific Advisory Board.

Department of Crop, Soil, and Environmental Sciences
115 Plant Science Building
Division of Agriculture
University of Arkansas
Fayetteville, Arkansas 72701
sharpley@uark.edu
Phone: (479) 575-5721

Tom Simpson, Ph.D.

President and Executive Director, Water Stewardship, Inc.

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Tom Simpson was a Professor of Soil Science at VA Tech and University of Maryland prior to founding Water Stewardship, Inc. in 2008 where he is Senior Scientist and Executive Director for Water Stewardship Inc. He manages the organization and provides scientific leadership in developing new and innovative approaches and tools that support conservation assessment, verification and implementation primarily related to water quality. Dr. Simpson led WSI's development of assessment and verification protocols for farm conservation and ecosystem service markets and developed the logic framework for the WSI Nutrient Load Estimator software. He helps lead efforts on systems approaches to BMP implementation, and BMP interactions and function at the landscape level in the U.S. and internationally. He led the 2006-2009 project to revise definitions and efficiencies for Chesapeake Bay Program BMPs. Dr. Simpson has written numerous papers and book chapters on soil and water quality and BMP effectiveness and has served on numerous expert panels to inform policy decisions and continues to provide science support to both public and private decision makers.

222 Severn Ave
Suite 11, Bldg 7 Annapolis, Maryland 21403
toms@waterstewardshipinc.org
Phone: (301) 873-2268

Gordon Smith, Ph.D
Carbon Development Director, Wildlife Works

Since 1994, Gordon Smith, Ph.D., has worked on mitigating greenhouse gas emissions by changing land use. He has expertise in forest carbon sequestration, avoided forest emissions (REDD+), soil carbon, manure management, fertilizer nitrous oxide, and soil methane. Dr. Smith has worked world wide on the entire spectrum of mitigation, including modeling likely emission benefits of project and programmatic activities, policy analysis for governments, standard and methodology development for offset registries, project development, project and methodology validation and verification, and verifier accreditation. He is an expert in biomass carbon sampling efficiency and designing sampling systems to meet precision goals. He is on the editorial board of the journal *Greenhouse Gas Measurement & Management*, is a member of the Greenhouse Gas Management Institute advisory committee, is a VCS expert in afforestation/deforestation, improved forest management, avoided deforestation (REDD), and agricultural land management, and is a member of the ACR AFOLU Technical Committee. He is currently Carbon Development Director for the REDD project developer Wildlife Works.

1402 Third Ave, Suite 900
Seattle, WA 98101
Phone: (206) 784-0209
gordon@wildlifeworks.com

Rebecca Stack
Low Impact Development (LID) Specialist, District of Columbia Department of Environment

Rebecca Stack serves as the Low Impact Development (LID) Specialist for the District of Columbia Department of Environment. Her work focuses on removing barriers to wide spread implementation of LID in the District. She collaborates across the public and private sector and works with permit reviewers to incorporate LID into projects. Rebecca received her civil engineering degree from Northeastern University and has researched bioretention field performance at University Maryland College Park. Rebecca has several years teaching experience including stream restoration, water quality and wetland ecology courses. Rebecca is currently leading the effort to update the District of

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Columbia's Stormwater Management Guidebook to include the latest suite of low impact development BMPs. Rebecca is a co-principal investigator on several District-wide research projects including a neighborhood scale investigation of the effects of low impact development retrofits on stormwater volumes.

1200 First St NE, 5th floor
Washington DC 20002
Phone: (202) 727-5160
stack.rebecca@dc.gov

Robert Traver, PhD, PE, D.WRE

Professor, Civil and Environmental Engineering
Director, Villanova Center for the Advancement of Sustainability in Engineering
Director, Villanova Urban Stormwater Partnership

Robert Traver is a Professor in the Department of Civil and Environmental Engineering at Villanova University, and Director of both Center for the Advancement of Sustainability in Engineering, and the Villanova Urban Stormwater Partnership. He has conducted research on topics that include modeling of stream hydraulics, urban hydrology, water quality, and sustainable stormwater management. He initiated the Stormwater Best Management Practice Demonstration and Research Park on the Villanova Campus. Dr Traver served on ASCE's External Review Panel (ERP) of the Corps investigation of Hurricane Katrina, and was a member of the National Academies Committee entitled *Reducing Stormwater Discharge Contributions to Water Pollution*. Dr Traver received his BSCE degree from the Virginia Military Institute, his MCE from Villanova, and his Ph.D. from The Pennsylvania State University. He is a licensed Professional Engineer.

800 E. Lancaster Ave
Villanova University—CEE Dept
Villanova, PA 19085
Phone: (610) 519-7899
Robert.Traver@Villanova.EDU
<http://www.homepage.villanova.edu/robert.traver/>

Dana York

President, Green Earth Connection, LLC

Dana York retired from the Natural Resource Conservation Service in January 2011 after a 34- year career with the Agency. She has formed a consulting group, Green Earth Connection to bring her expertise to the agricultural and environmental communities. Her training and organization leadership experience is also used to help organizations become more effective and efficient within current, expanding or decreasing resources. Her expertise includes: training and implementing BMP Identification projects, nutrient management, nutrient trading, the EPA Chesapeake Bay model and partnership building. She specializes in the development of dynamic business plans and project implementation with implementable and measurable goals and actions.

Prior to her retirement she was the Director of the Watershed and Landscape Programs Division, NRCS, in January 2010, where she directed the NRCS Watershed, Conservation Technical Assistance and Conservation Initiatives Programs. These programs assist communities with planning and implementing natural resource conservation on private lands from individual farms to large-scale watershed projects. She also coordinated the Agency's targeted efforts in large watersheds such as the

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Chesapeake Bay, Great Lakes and Upper Mississippi River Basin. Prior to returning to Washington, she was the Senior Advisor to the Chesapeake Bay Program in Annapolis, MD. As the Senior Advisor, she was the Agency's representative at the Environmental Protection Agency's Bay Program office and worked to implement the 2009 Chesapeake Bay Presidential Executive Order. From 2004 to 2009 she served at the Associate Chief for the Natural Resources Conservation Service. As the Associate Chief she managed the agency's overall programs and operations, including a \$3.2 billion annual budget.

She joined the NRCS National Headquarters staff in 1999 as a special assistant to the Chief and then as the Acting Director of Budget Planning Analysis Division, which is responsible for all Agency budget formulation. In 2001, she became the director of the NRCS Operations Management and Oversight Division with responsibility for the agency's operations management, including monitoring operations, business planning and accountability, and development and monitoring of accountability information systems. She also led the agency's efforts on quality assurance, oversight and evaluation.

York began her 34-year career with the former Soil Conservation Service (SCS) as a student trainee while attending Tennessee Technological University. She has held various positions with the agency in Tennessee, Georgia and Ohio, including Soil Conservationist, District Conservationist, State Resource Conservationist, Partnership Liaison and Deputy State Conservationist.

York is a native of Tennessee. She received a Bachelor of Science degree in Agricultural Science from Tennessee Technological University and a Master's degree in Industrial/Organizational Psychology from Middle Tennessee State University with an emphasis in organizational design and measurement, business planning and leading organizations and employees through change.

In September of 2007 Dana was awarded the President's Distinguished Rank Award, which is the highest award a career employee can receive for their career as a Senior Executive. In 2008 she received 2008 Agricultural Alumnus of the year from Tennessee Technological University.

108 South Liberty Street
Centreville, MD 21617
Phone: (410) 708-6794
dyork818@yahoo.com

Dan Zimmerman

Manager, Warwick Township, Lancaster County

As manager of Warwick Township since 1994, Dan Zimmerman oversees the day to day operations of the Administration, Public Works, and Police Departments. He also serves as the Administrator for the Warwick Township Municipal Authority. During his tenure, he has implemented a successful Transfer of Development Rights program. He continues to work with the Lancaster County Agricultural Preserve Board, Farmland Trust, and property owners to facilitate the Township's agricultural preservation program. He also works cooperatively with multiple agencies, land owners and developers to improve traffic movement through Warwick Township, including extensive improvements along the SR 501 corridor. Mr. Zimmerman has also fostered an innovative Lititz Run watershed management plan and a township-wide trails program. He serves as Secretary to the Lititz Run Watershed Alliance, and continues to facilitate stream improvement projects in Warwick Township.

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Before joining Warwick Township, Dan was Manager of Mount Joy Borough, Lancaster County, for seven years, and was with Hanover Borough, Lancaster County, also for seven years. He served as the Region Four Representative for the Lancaster County Planning Commission from 1992 to 2004, including serving as Chairman in 2001 and 2002. Dan has served on the Lancaster County Metropolitan Planning Organization since 1992, and is also Vice-Chairman of the Lancaster County Transportation Authority, which he has served on since 2000. Dan has also been a member of the Lancaster County Agricultural Preserve Board since 2005. He serves as Secretary to the Lititz Run Watershed Alliance, and is a member of the Pennsylvania Planning Association. He holds both a Masters and Bachelors degree from Shippensburg University.

P.O. Box 308
Lititz, PA 17543
Phone: (717) 626-8900
dzimmerman@warwicktowship.org

Panel Role in Development of the Verification Framework

Since being formally convened in September 2012,⁵ the Panel has met in three face-to-face meetings ([December 6, 2012](#), [August 28-29, 2013](#), [April 1, 2014](#) and [April 2, 2014](#)) and through five conference calls ([October 12, 2102](#), [June 19, 2013](#), [July 31, 2013](#), [October 31, 2013](#), and [November 1, 2013](#)). In carrying out its charge to date, the Panel has reviewed and provided feedback in the following areas:

- Reviewed and provided comments on the draft BMP verification principles to the BMP Verification Committee following its introductory conference call in October 2012;
- Heard detailed briefings from the six technical source sector workgroup chairs and coordinators on their initial draft BMP verification protocols and provided detailed feedback during the course of the Panel's December 2012 meeting;
- Provided initial feedback and recommendations on plans for clean-up of historic BMP databases back to the chair and coordinator of the Bay Program's Watershed Technical Workgroup;
- In response to detailed briefings on the steps being considered for ensuring full access to federal cost shared conservation practices and addressing double counting, Panel members provided the U.S. Geological Survey team with specific feedback and recommendations;
- Provided several rounds of feedback to the workgroups' chairs and coordinators on their draft and revised draft sets BMP verification guidance;

⁵ Invitation letters were sent to the 13 nominated panelists on September 18th, 2012. The letters are available online at http://www.chesapeakebay.net/groups/group/bmp_verification_review_panel, under the "Projects & Resources" tab.

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- Provided a comprehensive set of recommendations directed to the workgroups, jurisdictions, and BMP Verification Committee in November 2013; and
- Provided a Jurisdictional Verification Protocol Design Table to the jurisdictions and the six technical sector workgroups in April 2014 for use in drafting protocols and finalizing guidance, respectively.

Panel's Findings and Recommendations

As a follow through to its face to face meeting in August 2013 and follow-up conference calls in October and November 2013, the Panel drafted and distributed its *Chesapeake Bay Program Partnership BMP Verification Review Panel's Guidance and Recommendations to the Six Source Sector Workgroups, the CBP BMP Verification Committee, and the Seven Watershed Jurisdictions*⁶ (Appendix D). In April 2014, the Panel met in joint session with the BMP Verification Committee and reached agreement on moving forward up through the Bay Program on the revised draft basinwide BMP verification framework.

⁶ Chesapeake Bay Program Partnership BMP Verification Review Panel's Guidance and Recommendations to the Six Source Sector Workgroups, the CBP BMP Verification Committee, and the Seven Watershed Jurisdictions. Distributed November 19, 2013.

http://www.chesapeakebay.net/channel_files/21511/cbp_bmp_verif_review_panel_recommendations_11_19_2013.pdf